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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,992	03/07/2005	Shridhar Mubaraq Mishra	1890-0212	6982

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SILICON LABORATORIES INC.
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EXAMINER	
RUTKOWSKI, JEFFREY M	
ART UNIT	PAPER NUMBER
2619	
MAIL DATE	DELIVERY MODE
11/27/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/526,992	MISHRA ET AL.	
	Examiner	Art Unit	
	Jeffrey M. Rutkowski	2619	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 March 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *9-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 March 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *06/13/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-8 have been cancelled.

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "9" has been used to designate both offset register and a parser. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 9-28** are rejected under 35 U.S.C. 102(e) as being anticipated by Gentry, Jr. (US Pat 6,356,951), hereinafter referred to as Gentry.

4. For **claims 9 and 19**, Gentry teaches a Network Interface Card (NIC) card that receives packets from the Internet **[col. 16 line 65 to col. 17 line 2]**. A header parser **106** interfaces with an Input Processing Module **104 [figure 1A]**. Enough information is copied from each packet received at the NIC to allow packet headers (section identity information) to either be captured or identified **[col. 17 lines 8-20]** (receiving a data stream composed of interleaved sections of a plurality of different packets; receiving section identity information about each of the sections of data defining which packet it relates to). The full packet is buffered while the respective Layer 2 and Layer 3 packet headers are parsed **[col. 17 lines 15-20, figures 1, 4A-B]**. Once the packet is identified as a Transmission Control Protocol (TCP) packet, the offset to the data portion is identified by multiplying the value of the TCP Header Length field by four **[col. 19 lines 60-65]** (processing the data stream in a section-by-section manner, said processing including employing the section identity information to identify and extract data).

5. For **claim 10**, which depends from **claim 9**, Gentry teaches a pointer value is initially set to point to the twelfth byte of the Layer 2 protocol header and to read the two-byte value. The two-byte value determines whether the packets are Virtual Local Area Network (VLAN) tagged packets or 802.3 Ethernet with LLC SNAP encapsulation **[col. 17 lines 25-36, col. 18 line 22]** (identify structural features of the packets using the section identity information and the sections of data). A completion descriptor (user programmable registers) is used to hold an offset value to locate the beginning of a packet portion of a frame **[col. 57 lines 25-40]**. If the packet is identified as a Transmission Control Protocol (TCP) packet, the offset to the data portion is

identified by multiplying the value of the TCP Header Length field by four **[col. 19 lines 60-65]** (employ the offset information stored in the user programmable registers to identify and extract data from the packets in locations defined by the identified structural features of the packets and the offset information).

6. For **claims 11 and 14**, which depend from **claims 10 and 13 respectively**, Gentry anticipates the use of a scanning section by disclosing a parser method that identifies the type of Layer 2 and Layer 3 information in a packet **[figures 4A-B]** (wherein the parsing unit further comprises a scanning section configured to identify the structural features, the structural features including an identification of a location of layers of data in the packets). Gentry also anticipates the use of a parser section by disclosing information retrieved from a Transmission Control Protcol (TCP) header can be used to locate the data portion of a packet **[col. 19 lines 57-65 and figures 4A-B]** (parser section which uses the output of the scanning section and the offset information to extract the data).

7. For **claims 12, 17 and 18**, which depend from **claims 11, 16 and 14 respectively**, Gentry teaches VLAN tags can be detected in the layer 2 header portion of a packet **404 [figure 4A]** (wherein the scanning section is further configured to identify tagged packets).

8. For **claims 13 and 15**, Gentry teaches a header parser **106** interfaces with an Input Processing Module **104 [figure 1A]**. Enough information is copied from each packet received at the NIC to allow packet headers (section identity information) to either be captured or identified **[col. 17 lines 8-20]** (an interface configured to receive a data stream composed of a series of data sections, each data section corresponding to at least one packet; a parsing unit configured to receive the data sections sequentially, and to employ offset information stored in the registers to

identify and extract data from the data sections). A completion descriptor contains an offset to locate the beginning of a packet portion of a frame **[col. 57 lines 25-40]** (one or more user-programmable registers).

9. For **claims 16 and 22**, which depend from **claims 15 and 21 respectively**, Gentry teaches the layer 2 header is identified by setting a pointer to point to the twelfth byte of the layer 2 protocol **[col. 17 lines 20-30 and figures 4A-B]** (a second parser which extracts data using predetermined offset information). If the Internet Protocol (IP) header of the packet indicates TCP. Then the pointer is incremented to reach the beginning of the TCP header **[col. 19 lines 25-32]** (a first parser which extracts data identified using offset information stored in the user-programmable registers).

10. For **claims 20 and 26**, which depend from **claims 19 and 20 respectively**, Gentry teaches a pointer is used in parsing the packet is initialized and initially set to point to the twelfth byte of the Layer 2 protocol header and read the two-byte value, to determine whether the packets are Virtual Local Area Network (VLAN) tagged packets or 802.3 Ethernet with LLC SNAP encapsulation **[col. 17 lines 25-36, col. 18 line 22]** (identifying structural features of the packets using the section identity information and the sections of data; wherein the identifying structural features step includes identifying tagged packets). Figures 4A-4B show how a packet is parsed. Once the packet is identified as a TCP packet, the offset to the data portion is identified by multiplying the value of the TCP Header Length field by four **[col. 19 lines 60-65]** (employing offset information to identify and extract data from the packets in locations defined by the identified structural features of the packets and the offset information).

11. For **claim 21**, which depends from **claim 20**, Gentry teaches a completion descriptor that contains an offset to locate the beginning of a packet portion of a frame **[col. 57 lines 25-40]** (further comprising the step of storing at least some of the offset information in user programmable registers).

12. For **claim 23**, which depends from **claim 19**, Figures 4A-4B of Gentry anticipate the use of two parsers. Figure 4A discloses a parser that operates on layer two header information. While figure 4B discloses a parser that operates on layer three header information (wherein the processing step further comprises extracting data using a first parser and a second parser).

13. For **claim 24**, which depends from **claim 20**, Gentry teaches a parser method capable of identifying layer 2 and layer 3 header information **[figures 4A-4B]** (wherein the identifying structural features step includes identifying a location of layers within the packets).

14. For **claim 25**, which depends from **claim 24**, Gentry teaches a parser capable of detecting a VLAN tagged header **404 [figure 4A]** (wherein the identifying structural features step includes identifying tagged packets).

15. For **claims 27-28**, which depend from **claims 26 and 24 respectively**, Gentry teaches a parser capable of identifying LLC SNAP information **410 [figure 4A]** (wherein the identifying structural features step includes identifying snapped packets).

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Muller et al. (US Pat 6,480,489) discloses using a parser to identify the type of packet transmitted and generate a flow key.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey M. Rutkowski whose telephone number is (571) 270-1215. The examiner can normally be reached on Monday - Friday 7:30-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeffrey M Rutkowski
Patent Examiner
11/21/2007

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